

Air Resources Board

Gray Davis

Alan C. Lloyd, Ph.D. Chairman

9528 Telstar Avenue • P.O. Box 8001 • El Monte, California 91731 • www.arb.ca.gov

November 7, 2002

Mr. Julian Imes Director, Exhaust/Emissions Technology Donaldson Company, Inc. P.O. Box 1299 Minneapolis, MN 55440-1299

Dear Mr. Julian Imes:

Reference No. RAS-02-33

The California Air Resources Board (ARB) has reviewed your request for verification using the Verification Procedure for In-Use Strategies to Control Emissions from Diesel Engines in Appendix A of the Staff Report for the following systems:

(1) The Donaldson DCM diesel oxidation catalyst (DOC) mufflers with 6000 Series catalyst formulation plus closed loop crankcase with Donaldson Spiracle ™ closed crankcase filtration systems with commercially available California diesel fuel or fuel with a lower sulfur content. Based on its evaluation of the data provided, ARB hereby verifies that this system reduces emissions of diesel particulate matter (PM) consistent with a Level 1 system in engines used in on-road applications belonging to the engine families listed in Table 1 in Attachment A and Table 2 in Attachment B.

As specified in the Diesel Emission Control Strategy Verification Procedure, the ARB assigns each Diesel Emission Control Strategy a family name. The designated family name for this system is **CA/DON/2002/PM1/N00/ON/SYS01**. This identification number should be used in reference to this verification as part of the system-labeling requirement.

(2) The Donaldson DCM DOC mufflers with 6100 Series catalyst formulation plus closed loop crankcase with Donaldson Spiracle ™ closed crankcase filtration systems with 15 ppm or less sulfur diesel fuel. Based on its evaluation of the data provided, ARB hereby verifies that this system reduces emissions of diesel PM consistent with a Level 1 system in engines used in on-road applications belonging to the engine families listed in Table 1 in Attachment A and Table 2 in Attachment B.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: http://www.arb.ca.gov.

California Environmental Protection Agency

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The designated family name for this system is **CA/DON/2002/PM1/N00/ON/SYS02.** This identification number should be used in reference to this verification as part of the system-labeling requirement.

(3) The Donaldson DCM DOC mufflers with 6100 Series catalyst formulation alone on 15 ppm or less sulfur fuel. Based on its evaluation of the data provided, ARB hereby verifies that this system reduces emissions of diesel PM consistent with a Level 1 system in engines used in on-road applications belonging to the engine families listed in Table 2 located in Attachment B.

The designated family name for this system is **CA/DON/2002/PM1/N00/ON/SYS03.** This identification number should be used in reference to this verification as part of the system-labeling requirement.

To meet the conditions of this verification, the Spiracle CCV Filtration System requires that the filter cartridge must be changed at every lube oil change recommended by the engine manufacturer or every 500 hours, whichever comes first.

The aforementioned verifications are valid provided that the engine is both certified in California for on-road applications and used in on-road applications.

The ARB estimates that these systems will incur no discernible fuel economy penalty when used in a compatible application.

Additionally, as stated in the Diesel Emission Control Strategy Verification Procedure, Donaldson Company, Inc. is responsible for honoring a warranty (Section 2707) and conducting in-use compliance testing (Section 2709).

Thank you for participating in ARB's diesel emission control strategy verification program. Should you have any questions or comments, please contact Ms. Annette Hebert, Branch Chief, Heavy-Duty Diesel In-Use Strategies Branch, at (626) 575-6973.

Sincerely,

/s/

Robert H. Cross, Chief Mobile Source Control Division

Attachments